

Note on the Genus *Vaneeckeia* KIRIAKOFF, with Description of a New Species (Lepidoptera: Notodontidae)

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In this paper the author will describe a new species from Iriomotejima Island belonging to a genus new to our fauna. The genus *Vaneeckeia* KIRIAKOFF, closely allied to the genus *Quadricalcarifera* STRAND, has been known to contain one species and four subspecies from the Oriental Region.

Genus *Vaneeckeia* KIRIAKOFF

Vaneeckeia KIRIAKOFF, 1967, Tijdschr. Ent., **110**: 49, fig. 27. Type-species: *Stauropus ovalis* VAN EECKE.

The genus *Vaneeckeia* established by KIRIAKOFF is closely related to the genus *Quadricalcarifera* STRAND from which it can be distinguished by the following characters.

Tibia: hind tibia with two pairs of spurs, the medial spurs shorter than the apical ones, while in *Quadricalcarifera* the length of two pairs of spurs is equal.

Venation: almost same plan to *Quadricalcarifera*. Stalk of 7, (8+9), 10, shorter than that of (8+9), 10, but in *Quadricalcarifera* the former is longer. Although KIRIAKOFF describes that vein 6 is short-stalked with 7-10, but 6 arises from the anterior edge of discocellulars, being not stalked with 7-10.

Male genitalia (Figs. 6-12): Uncus beak-like covered with dense hairs. Valvae asymmetrical: right valva with a projection, but left one with no projection. KIRIAKOFF's illustration shows that left valva has a projection near apex, while HOLLOWAY's drawing indicates asymmetrical valvae.

Female genitalia (Fig. 13): Female genitalia of the genus is first illustrated here. The chief distinguishing characters are the presence of a deep invagination of the 8th abdominal sternite into which the ostium opens. No signum.

1. *Vaneeckeia pallidifascia* (HAMPSON)

Stauropus pallidifascia HAMPSON, 1892: 151.

1a. *Vaneeckeia pallidifascia pallidifascia* (HAMPSON)

Stauropus pallidifascia HAMPSON, 1892: 151; DUDGEON, 1898: 632; DE JOANNIS, 1929: 455.

Desmeocraera pallidifascia: GAEDE, 1930: 131; 1934: 38.

Vaneeckeia pallidifascia: KIRIAKOFF, 1968: 129.

Material examined. India: 1 ♀, Siam, Khao Yai, iii. 1973 (E. DIEHL).

Distrobution. Sikkim, India.

1b. *Vaneeckeia pallidifascia ovalis* (VAN EECKE)

Stauropus ovalis VAN EECKE, 1929: 166, pl. 14, fig. 7.

Desmeocraera pallidifascia var. *ovalis*: GAEDE, 1934: 38.

Quadricalcarifera pallidifascia ovalis: KIRIAKOFF, 1960: 4.

Vaneeckeia ovalis: KIRIAKOFF, 1967: 49, fig. 27.

Vaneeckeia pallidifascia ovalis: KIRIAKOFF, 1968: 130; 1974: 397; BENDER & DIERL, 1976: 125.

Male genitalia. As in fig. 8.

Material examined. Sumatra: 1 ♂, Prapat, 28. xii. 1975 (R. BENDER & E. DIEHL); 1 ♀, ditto, 7. ii. 1976 (E. DIEHL); 1 ♂, Bandar Baru near Medan, 7. iv. 1977; 1 ♀, ditto, 21. iii. 1977; 4 ♂, 4 ♀, ditto, 9–14. iii. 1978 (T. HASEGAWA). Malaya: 1 ♂, Tanah Rata, Perak, 16. vii.–5. viii. 1976 (WONG P. E.).

Distribution. Sumatra, Malaya.

1c. *Vaneeckeia pallidifascia germana* (ROTHSCHILD)

Stauropus germanus ROTHSCCHILD, 1917: 244.

Desmeocraera pallidifascia var. *germanus*: GAEDE, 1930: 631, pl. 84a; 1934: 38.

Vaneeckeia pallidifascia germana: KIRIAKOFF, 1968: 130.

Vaneeckeia germana: KIRIAKOFF, 1967: 205.

Vaneeckeia pallidifascia ovalis: HOLLOWAY, 1976: 56, fig. 368.

Distribution. Borneo, New Guinea.

1d. *Vaneeckeia pallidifascia centrobrunnea* (MATSUMURA)

(Figs. 3, 4)

Quadricalcarifera centro-brunnea MATSUMURA, 1927: 11, pl. 1, fig. 4(♂); 1931: 657, fig. 245; GAEDE, 1934: 38; SUGI, 1979: 22.

Quadricalcarifera concentrica MATSUMURA, 1927: 11, pl. 1, fig. 11(♀); 1931: 657, fig. 246; 1934: 175; GAEDE, 1934: 38; SUGI, 1979: 22.

Desmeocraera pallidifascia: MATSUMURA, 1934: 175.

Vaneeckeia pallidifascia centrobrunnea: KIRIAKOFF, 1968: 129.

Male genitalia. As in figs. 7, 10, 12.

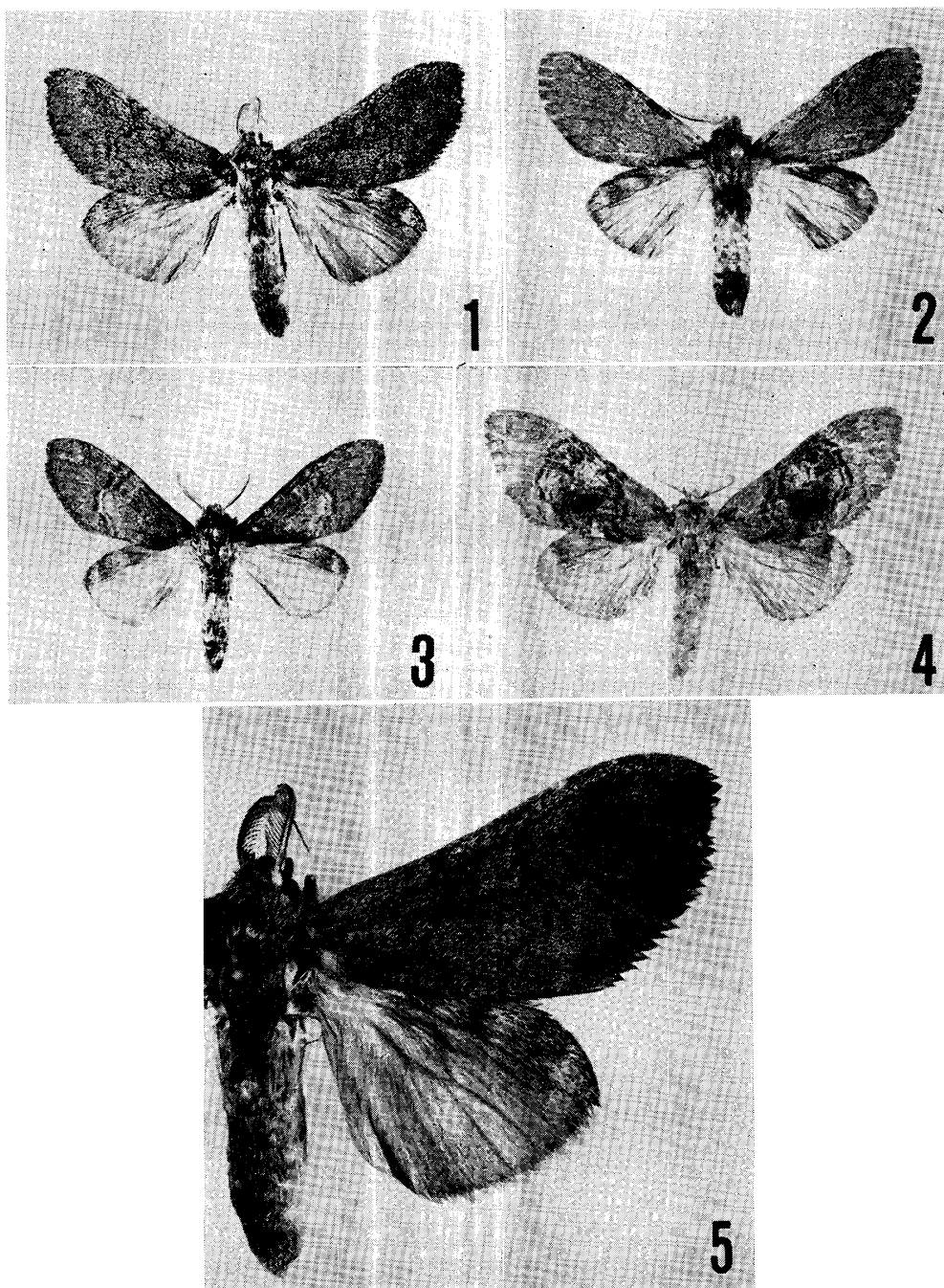
Female genitalia. As in fig. 13.

Type-material examined. Holotype of *Quadricalcarifera concentrica*, ♀, Formosa, Baibara, 22. vii. 1925. Genitalia slide Ntd. 20. In Hokkaido University. Holotype of *Quadricalcarifera centrobrunnea*, ♂, not found in the collection of Hokkaido University.

Other material. Formosa: 1 ♂, 1 ♀, Lushan spa, Nantou, 29. iv.–1. v. 1973 (K. NAKATOMI); 3 ♂, 1 ♀, Wulai, Taipei, 2–4. v. 1973 (K. NAKATOMI); 2 ♂, 1 ♀, ditto, 30. iv. 1974 (K. NAKATOMI); 2 ♀, ditto, 4–6. v. 1968 (Y. WATANABE); 1 ♀, Puli, Nantou, 20. vii. 1974 (ex H. KEZUKA); 1 ♂, Mt. Lalashan, Taipei, 6–7. v. 1975 (ex H. KEZUKA).

Distribution. Formosa.

Remarks. I have been unable to examine material from Borneo, New Guinea and male from India. Further material is needed before the difference can be confirmed between the nominate subspecies and others. One male from Malaya (Fig. 8) before me is not distinguishable from Sumatran material both in external and genitalic characters. Material from Formosa can be separable from Sumatran and Malayan material by the shape of uncus, valva and aedeagus. *Centrobrunnea* may be a good species. I have examined the holotype of *Q. concentrica* MATS. and its genitalia slide.

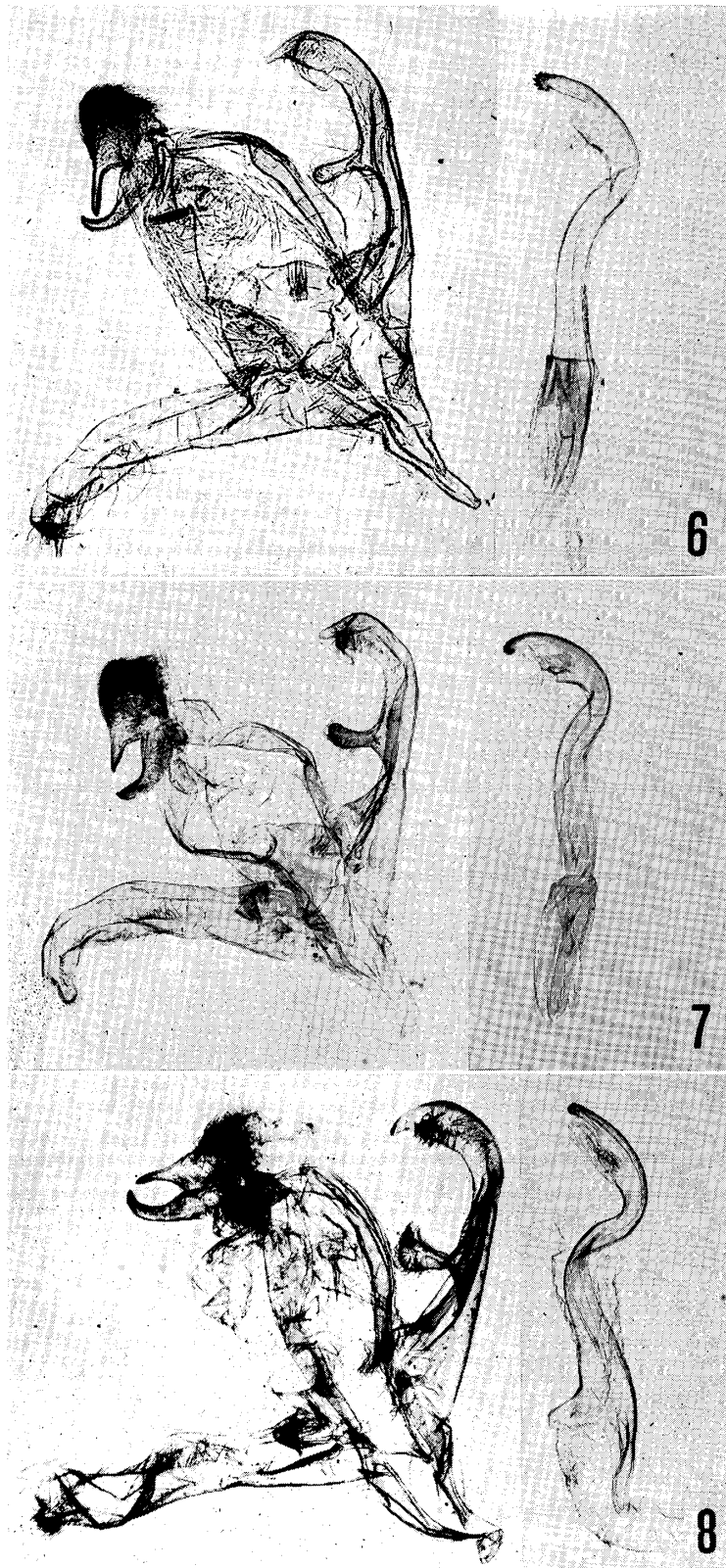


Figs. 1–5. *Vaneeckeia* spp. 1 & 5. *Vaneeckeia iriomotensis* sp. n., holotype ♂, vernal brood. 2. ditto, ♂, paratype, autumnal brood. 3. *Vaneeckeia pallidifascia centrobrunnea* (MATSUMURA), ♂, Formosa. 4. ditto, ♀, Formosa.

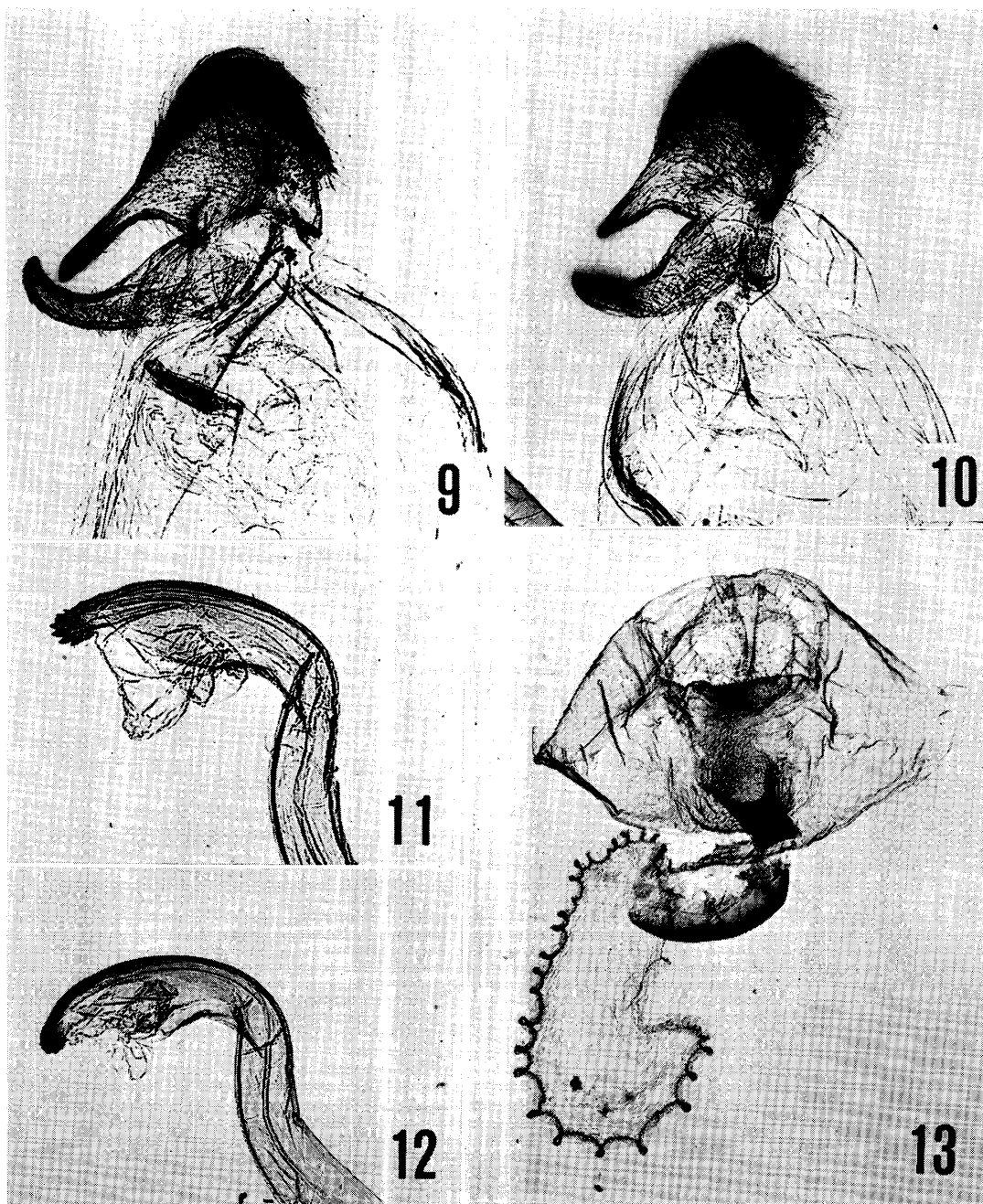
Females from Formosa exactly match the holotype. As KIRIAKOFF stated, *Q. concentrica* is doubtless conspecific with *Q. centrobrunnea*, though I have been unable to examine the holotype of the latter.

2. *Vaneeckeia iriomotensis* sp. n.
(Figs. 1, 2, 5)

Male. Length of forewing 20–23 mm. Antenna bipectinated for four-fifths from



Figs. 6-8. Male genitalia of *Vaneeckeia*. 6. *Vaneeckeia iriomotensis* sp. n., para-type, genitalia slide no. KN-301. 7. *Vaneeckeia pallidifascia centrobrunnea* (MATSUMURA), Formosa, slide KN-306. 8. *Vaneeckeia pallidifascia ovalis* (VAN EECKE), Malaya, slide KN-305.



Figs. 9–12. Male genitalia. 9. Uncus of *Vaneeckeia iriomotensis* sp. n. 10. Uncus of *Vaneeckeia pallidifascia centrobrunnea* (MATSUMURA). 11. Apex of aedeagus: *V. iriomotensis*. 12. Apex of aedeagus: *V. pallidifascia centrobrunnea*.
Fig. 13. Female genitalia of *Vaneeckeia pallidifascia centrobrunnea*, slide KN-308.

base, with filiform apical area; base and shaft of antenna white, rest pale brown. Palpus cream coloured, dark brown above. Head and thorax clothed with brown hair, mixed with white. Abdomen dark brown, paler laterally and ventrally. Forewing yellowish green in ground colour with dark brown ante- and postmedian lines; the double antemedian line incurved between vein 1b and discoidal cell; postmedian line excurved between veins 2 and 5, continuing to the anterior side of the discoidal cell, running directly to the costal margin. Hindwing pale brownish, veins and terminal

line brown, costa broadly barred with white and brown.

Male genitalia (Figs. 6, 9, 11). Uncus produced into beak-like process covered with dense black hairs. Tegmen narrow. Valva narrow and asymmetrical: right valva with a lobe-shaped projection in middle covered with spinules, left valva with no projection, the top valva with a short process. Aedeagus slightly longer than valva, arched, bearing some subterminal process. Juxta semicircular, hairy. Saccus semicircular with a process. Eighth sternite angular with a proxiam process; distal margin produced in middle.

Female. Unknown.

Holotype: ♂, Iriomotejima Is., Mariudo water fall, Okinawa Pref., Japan. 19–20. iii. 1974 (Y. FUJIMAKI). Paratypes: 9 ♂, same data as holotype; 1 ♂, Iriomotejima Is., Sonai, 20. iii 1975 (K. NAKATOMI); 1 ♂, Iriomotejima Is., Shirahama, 27. v. 1973 (Y. KUROSAWA); 2 ♂, Iriomotejima Is., Komi, 24–26. x. 1973 (M. OWADA). The holotype and a paratype will be deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo. The others are in the authors collection.

Distribution. Known only from the type-locality (Iriomotejima Is.).

Seasonal variation. The wing of vernal brood is broader than those of aestival and autumnal broods.

Remarks. The new species is easily distinguishable from *pallidifascia* by the colour pattern of forewing; the area between antemedian line and postmedian line is covered with yellowish green scales as on the rest area of forewing. In *pallidifascia*, the interspace between the two lines is rufous brown, making a disc, while the basal area and distal one-third slate grey. This species is separable from *pallidifascia* by the male genitalia, especially in the shape of aedeagus, uncus and the projectin of right valva.

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摘 要

中臣謙太郎: *Vaneeckeia* 属の紹介と 1 新種の記載

沖縄西表島より発見されたアオシャチホコ属に近縁の種は、左右不对称の雄交尾器の形状から、*Vaneeckeia* STRAND に属することが明らかになった。台湾産の *Vaneeckeia pallidifascia centrobrunnea* (MATSUMURA) ナカモンシャチホコ、スマトラ産の *V. pallidifascia ovalis* (VAN EECKE) 等の材料と比較し、外見からも雄交尾器の形態からも、明らかに別種と考えられるので、新種として記載した。

Vaneeckeia iriomotensis NAKATOMI イリオモテナカモンシャチホコ (新称)

Centrobrunnea と *ovalis* とは、明らかに区別でき、別種であるかも知れないが、原名亜種等さらに材料を集めた上で再検討することにし、ここでは KIRIAKOFF の扱いに従い、*pallidifascia* の亜種としておく。